



#5

A-665B.ST25.txt
SEQUENCE LISTING

<110> KOSTENUIK, PAUL
LIU, CHUAN-FA
LACEY, DAVID LEE

<120> MODULATORS OF RECEPTORS FOR PARATHYROID HORMONE AND PARATHYROID HORMONE-RELATED PROTEIN

<130> A-665B

<140> 09/843,221
<141> 2001-04-26

<150> 60/266,673
<151> 2001-02-06

<150> 60/214,860
<151> 2000-06-28

<150> 60/200,053
<151> 2000-04-27

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<170> PatentIn version 3.1

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ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc	96
Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu	
20 25 30	
atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gac gtg agc	144
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Asp Val Ser	
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cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag	192
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu	
50 55 60	
gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg	240
Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr	
65 70 75 80	
tac cgt gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat	288
Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn	
85 90 95	
ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc	336
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro	
100 105 110	
atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag	384

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Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	
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Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	
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gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc	acg	cct	528
Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	
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ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	aag	ctc	acc	576
Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	
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Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	
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atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	ctg	672
Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	
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Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln

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Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
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Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
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Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
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Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
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Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
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Trp Leu Arg Lys Lys Leu
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20 25 30

Asn Phe Val Ala Leu Gly Ala Pro Leu Ala Pro Arg Asp Ala Gly Ser
35 40 45

Gln Arg Pro Arg Lys Lys Glu Asp Asn Val Leu Val Glu Ser His Glu
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Lys Ser Leu Gly Glu Ala Asp Lys Ala Asp Val Asn Val Leu Thr Lys
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Ala Lys Ser Gln

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Ser Val Glu Arg Met Gln Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe Val Ser Leu Gly Val Gln Met Ala Ala Arg Glu Gly Ser Tyr
35 40 45

Gln Arg Pro Thr Lys Lys Glu Asp Asn Val Leu Val Asp Gly Asn Ser
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Lys Ser Leu Gly Glu Gly Asp Lys Ala Asp Val Asp Val Leu Val Lys
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Ala Lys Ser Gln

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Trp Leu Arg Lys Lys Leu Gln Asp Val His Asn Phe Val Ala Leu Gly
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Ala Pro Leu Ala Pro Arg Asp Ala Gly Ser Gln Arg Pro Arg Lys Lys
Page 9

35

40

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Glu Asp Asn Val Leu Val Glu Ser His Glu Lys Ser Leu Gly Glu Ala
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Asp Lys Ala Asp Val Asn Val Leu Thr Lys Ala Lys Ser Gln
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Asn Phe Val Ala Leu Gly Ala Pro Leu Ala Pro Arg
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Phe Val Ala Leu Gly
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Asn Tyr

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Asn Tyr

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20 25 30

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Leu Arg Lys Lys Leu Gln Asp Val His Asn Tyr
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Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
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Ser Val Ser Glu Ile Gln Leu Met His Asn Arg Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 41
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<400> 41

Ser Val Ser Glu Ile Gln Leu Met His Asn Lys Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 42

<211> 30

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<400> 42

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Arg Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 43

<211> 30

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<400> 43

Tyr Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 44

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 44

Ser Val Ser Glu Ile Gln Leu Leu His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Leu Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

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<210> 45
<211> 30
<212> PRT
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<220>
<223> bovine

<400> 45

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 46
<211> 30
<212> PRT
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<223> modified bovine PTH

<400> 46

Ala Val Ser Glu Ile Gln Phe Leu His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Leu Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 47
<211> 30
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<223> porcine PTH

<400> 47

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Leu Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 48
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> rat PTH

<400> 48

Ala Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Ala
1 5 10 15

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Ser Val Glu Arg Met Gln Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 49
<211> 30
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<400> 49

Ala Val Ser Glu Ile Gln Leu Leu His Asn Leu Gly Lys His Leu Ala
1 5 10 15

Ser Val Glu Arg Leu Gln Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 50
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<400> 50

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Leu Leu Gln Asp
20 25 30

<210> 51
<211> 29
<212> PRT
<213> Homo sapiens

<400> 51

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln
20 25

<210> 52
<211> 28
<212> PRT
<213> Homo sapiens

<400> 52

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu
20 25

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<210> 53
<211> 28
<212> PRT
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<400> 53

Ser Glu Ile Gln Leu Leu His Asn Leu Gly Lys His Leu Asn Ser Leu
1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25

<210> 54
<211> 28
<212> PRT
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<400> 54

Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser Ser Met
1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25

<210> 55
<211> 28
<212> PRT
<213> Artificial Sequence

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<400> 55

Ser Glu Ile Gln Phe Leu His Asn Leu Gly Lys His Leu Ser Ser Leu
1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25

<210> 56
<211> 24
<212> PRT
<213> Homo sapiens

<400> 56

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp

<210> 57
<211> 24
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<220>
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<400> 57

Leu Leu His Asn Leu Gly Lys His Leu Asn Ser Leu Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
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<210> 58
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> bovine

<400> 58

Phe Met His Asn Leu Gly Lys His Leu Ser Ser Met Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
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<210> 59
<211> 24
<212> PRT
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<400> 59

Phe Leu His Asn Leu Gly Lys His Leu Ser Ser Leu Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
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<210> 60
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<212> PRT
<213> Artificial Sequence

<220>
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<400> 60

Phe Leu His Asn Leu Trp Lys His Leu Ser Ser Leu Glu Arg Val Glu
Page 22

Trp Leu Arg Lys Lys Leu Gln Asp
20

<210> 61
<211> 24
<212> PRT
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<220>
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<220>
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<223> D amino acid

<400> 61

Phe Met His Asn Leu Lys Trp His Leu Ser Ser Met Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
20

<210> 62
<211> 86
<212> PRT
<213> Homo sapiens

<400> 62

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro Asn Ser Lys Pro
35 40 45

Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly Ser Asp Asp Glu
50 55 60

Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu Thr Tyr Lys Glu
65 70 75 80

Gln Pro Leu Lys Thr Pro
85

<210> 63
<211> 34
<212> PRT
<213> Homo sapiens

<400> 63

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Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala

<210> 64
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 64

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala Glu Tyr
35

<210> 65
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 65

Ala Val Ser Glu Ile Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Trp Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala Glu Tyr
35

<210> 66
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 66

Tyr Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile
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1

5

10

15

Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile
20 25 30

His Thr Ala
35

<210> 67
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
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<400> 67

Ala Val Ser Glu His Gln Leu Leu His Asn Leu Lys Ser Ile Gln Asp
1 5 10 15

Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His Thr
20 25 30

Ala

<210> 68
<211> 28
<212> PRT
<213> Homo sapiens

<400> 68

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 69
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<212> PRT
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<400> 69

Leu Leu His Asn Leu Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 70
<211> 28

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<212> PRT
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<220>
<223> modified PTHrP

<400> 70

Leu Leu His Asp Lys Gly Lys Ser Ile Asn Leu Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 71
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<400> 71

Leu Leu His Asp Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 72
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<223> D amino acid

<400> 72

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 73
<211> 27
<212> PRT
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A-665B.ST25.txt

<220>
<223> modified PTHrP

<220>
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<222> (5)...(5)
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<400> 73

Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 74
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<220>
<221> misc_feature
<222> (5)...(5)
<223> D amino acid

<400> 74

Leu His Asn Leu Phe Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 75
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<220>
<221> misc_feature
<222> (6)...(6)
<223> D amino acid

<400> 75

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

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<210> 76
<211> 30
<212> PRT
<213> Homo sapiens

<400> 76

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu
20 25 30

<210> 77
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 77

Ala Val Ser Glu Ile Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Trp Leu His His Leu Ile Ala Glu
20 25 30

<210> 78
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
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<400> 78

Tyr Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile
1 5 10 15

Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu
20 25 30

<210> 79
<211> 30
<212> PRT
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<220>
<221> misc_feature
<222> (12)..(12)
<223> D amino acid

<400> 79

Ala Val Ser Glu His Gln Leu Leu His Asn Leu Phe Lys Ser Ile Gln
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1

5

10

15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu
20 25 30

<210> 80
<211> 24
<212> PRT
<213> Homo sapiens

<400> 80

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu
20

<210> 81
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 81

Leu Leu His Asn Leu Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu
20

<210> 82
<211> 24
<212> PRT
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<223> modified PTHrP

<400> 82

Leu Leu His Asp Lys Gly Lys Ser Ile Asn Leu Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu
20

<210> 83
<211> 23
<212> PRT
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<220>
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<400> 83

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Leu Leu His Asp Leu Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu
20

<210> 84
<211> 23
<212> PRT
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<220>
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<400> 84

Leu Leu His Asn Leu Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu
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<222> (5)..(5)
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<400> 85

Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu
20

<210> 86
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<222> (5)..(5)
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<400> 86

Leu His Asn Leu Phe Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

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Leu His His Leu Ile Ala Glu
20

<210> 87
<211> 24
<212> PRT
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<220>
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<220>
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<223> D amino acid

<400> 87

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu
20

<210> 88
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
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<400> 88

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Asn Phe

<210> 89
<211> 34
<212> PRT
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<220>
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<400> 89

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Lys Lys Leu His
20 25 30

Asn Phe

<210> 90
<211> 34
<212> PRT
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<220>
<223> modified human PTH

<400> 90

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ala Leu Ala Glu Ala Leu Ala Glu Ala Leu His
20 25 30

Asn Phe

<210> 91
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
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<400> 91

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ser Leu Leu Ser Ser Leu Leu Ser Ser Leu His
20 25 30

Asn Phe

<210> 92
<211> 34
<212> PRT
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<220>
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<400> 92

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Asn Phe

<210> 93
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 93

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys Leu His Asn Phe
20 25

<210> 94
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
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<400> 94

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys Leu His Asn Phe
20 25

<210> 95
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
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<400> 95

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala Leu His Asn Phe
20 25

<210> 96
<211> 28
<212> PRT
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<220>
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<400> 96

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Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ser
1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser Leu His Asn Phe
20 25

<210> 97
<211> 28
<212> PRT
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<400> 97

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys Leu His Asn Phe
20 25

<210> 98
<211> 34
<212> PRT
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<220>
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<400> 98

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ala

<210> 99
<211> 34
<212> PRT
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<400> 99

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Lys Lys Leu His
20 25 30

Thr Ala

<210> 100
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<220>
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<400> 100

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Leu Ala Glu Ala Leu Ala Glu Ala Leu His
20 25 30

Thr Ala

<210> 101
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<400> 101

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ser Leu Leu Ser Ser Leu Leu Ser Ser Leu His
20 25 30

Thr Ala

<210> 102
<211> 34
<212> PRT
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<220>
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<400> 102

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Thr Ala

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<212> PRT
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<220>
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<400> 103

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys Leu His Thr Ala
20 25

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<400> 104

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys Leu His Thr Ala
20 25

<210> 105
<211> 28
<212> PRT
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<220>
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<400> 105

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala Leu His Thr Ala
20 25

<210> 106
<211> 28
<212> PRT
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<220>
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<400> 106

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ser
1 5 10 15

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Leu Leu Ser Ser Leu Leu Ser Ser Leu His Thr Ala
20 25

<210> 107
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
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<400> 107

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys Leu His Thr Ala
20 25

<210> 108
<211> 34
<212> PRT
<213> Artificial Sequence

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<400> 108

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Arg Lys Leu His
20 25 30

Thr Ala

<210> 109
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrp

<400> 109

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ser

<210> 110
<211> 37

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<212> PRT
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<220>
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<400> 110

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ala Gly Arg Arg
35

<210> 111
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
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<400> 111

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu Lys
20 25 30

Glu Leu

<210> 112
<211> 34
<212> PRT
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<220>
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<400> 112

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Ala Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ala

<210> 113
<211> 34
<212> PRT
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<220>
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<400> 113

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ala

<210> 114
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<212> PRT
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<223> modified human PTHrP

<400> 114

Ala Val Ser Glu Ala Gln Leu Leu His Asp Leu Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Ala Leu

<210> 115
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 115

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg Leu His
20 25 30

Thr Ala

<210> 116
<211> 33
<212> PRT
<213> Artificial Sequence

<220>

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<223> modified human PTHrP

<400> 116

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg Leu His Thr
20 25 30

Ala

<210> 117

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 117

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg Leu His
20 25 30

Thr Ala

<210> 118

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 118

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg Leu His
20 25 30

Thr Ala

<210> 119

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

A-665B.ST25.txt

<400> 119

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Leu Ala Glu Ala Leu Ala Glu Ala Leu His
20 25 30

Thr Ala

<210> 120

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 120

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ser Leu Leu Ser Ser Leu Leu Ser Ser Leu His
20 25 30

Thr Ala

<210> 121

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 121

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Thr Ala

<210> 122

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 122

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Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Asn Tyr

<210> 123
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 123

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Met Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Asn Tyr

<210> 124
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 124

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 125
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 125

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Lys Lys
20 25 30

<210> 126
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 126

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ala Leu Ala Glu Ala Leu Ala Glu Ala
20 25 30

<210> 127
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 127

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ser Leu Leu Ser Ser Leu Leu Ser Ser
20 25 30

<210> 128
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 128

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Asn Phe

<210> 129
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

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<400> 129

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys
20

<210> 130

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 130

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys
20

<210> 131

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 131

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala
20

<210> 132

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 132

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ser
1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser
20

<210> 133

<211> 24

<212> PRT

<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 133

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys
20

<210> 134
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 134

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 135
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 135

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Lys Lys
20 25 30

<210> 136
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 136

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Leu Ala Glu Ala Leu Ala Glu Ala
20 25 30

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<210> 137
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 137

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ser Leu Leu Ser Ser Leu Leu Ser Ser
20 25 30

<210> 138
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 138

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys
20 25 30

<210> 139
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 139

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys
20

<210> 140
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 140

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys
20

<210> 141
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 141

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala
20

<210> 142
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 142

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ser
1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser
20

<210> 143
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 143

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys
20

<210> 144
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 144

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Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Arg Lys
20 25 30

<210> 145
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 145

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 146
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 146

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr

<210> 147
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 147

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 148
<211> 30

A-665B.ST25.txt

<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 148

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Ala Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 149
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 149

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Ala Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 150
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 150

Ala Val Ser Glu Ala Gln Leu Leu His Asp Leu Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 151
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 151

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg
20 25 30

<210> 152
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 152

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg
20 25

<210> 153
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 153

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg
20 25 30

<210> 154
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 154

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg
20 25 30

<210> 155
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 155

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Leu Ala Glu Ala Leu Ala Glu Ala
20 25 30

<210> 156
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 156

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ser Leu Leu Ser Ser Leu Leu Ser Ser
20 25 30

<210> 157
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 157

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys
20 25 30

<210> 158
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 158

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 159
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

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<400> 159

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
1 5 10 15

Ser Met Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 160

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> TIP39

<400> 160

Ser Leu Ala Leu Ala Asp Asp Ala Ala Phe Arg Glu Arg Ala Arg Leu
1 5 10 15

Leu Ala Ala Leu Glu Arg Arg His Trp Leu Asn Ser Tyr Met His Lys
20 25 30

Leu Leu Val Leu Asp Ala Pro
35

<210> 161

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (34)..(34)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 161

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 162

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

A-665B.ST25.txt

<220>
<221> misc_feature
<222> (34)..(34)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 162

Ser Val Ser Glu Ile Gln Leu Met His Asn Arg Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 163
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Preferred embodiments - PTH

<220>
<221> misc_feature
<222> (34)..(34)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 163

Ser Val Ser Glu Ile Gln Leu Met His Asn Lys Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 164
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Preferred embodiments - PTH

<220>
<221> misc_feature
<222> (34)..(34)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 164

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

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Ser Met Arg Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 165
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Preferred embodiments - PTH

<220>
<221> misc_feature
<222> (31)..(31)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 165

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val
20 25 30

<210> 166
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Preferred embodiments - PTH

<220>
<221> misc_feature
<222> (30)..(30)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 166

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 167
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Preferred embodiments - PTH

<220>
<221> misc_feature
<222> (1)..(1)
<223> Fc domain attached at the N-terminus through optional linker

<400> 167

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln
20 25

<210> 168

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (1)...(1)

<223> Fc domain attached at the N-terminus through optional linker

<400> 168

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu
20 25

<210> 169

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTHrP

<220>

<221> misc_feature

<222> (28)...(28)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 169

Leu Leu His Asn Leu Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 170

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - TIP39

A-665B.ST25.txt

<220>
<221> misc_feature
<222> (39)..(39)
<223> Optional linker and Fc domain attached at the C-terminus

<400> 170

Ser Leu Ala Leu Ala Asp Asp Ala Ala Phe Arg Glu Arg Ala Arg Leu
1 5 10 15

Leu Ala Ala Leu Glu Arg Arg His Trp Leu Asn Ser Tyr Met His Lys
20 25 30

Leu Leu Val Leu Asp Ala Pro
35